



UNIVERSITI PUTRA MALAYSIA

**INNOVATION MANAGEMENT IN MALAYSIAN ORGANISATIONS
- A COMPARISON BETWEEN JAPANESE AND MALAYSIAN
ORGANISATIONS**

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By

ADELINE CHEONG YU NAH

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April 1998

Chairperson : Professor Madya Dr. Mohd Zain Bin Mohamed

Faculty : Economics and Management

This study was conducted out of the need to examine the innovation management in Malaysian organisations (a comparison between the Japanese and the Malaysian organisations). The innovativeness of twelve organisations, where six are Japanese and the other six are Malaysian, was compared using the creative climate questionnaire (CCQ) developed by Ekvall et. al. (1983). Besides that, various aspects of innovation in the Japanese and the Malaysian organisations such

as the technological and process innovation, product innovation, the cultural and financial performance of the organisations are being compared.

Data for this research was obtained through interviews, the use of validated questionnaire, and the secondary sources. The results from this study showed that both the Malaysian and Japanese organisations are innovative. However, the Japanese organisations have a more creative climate, emphasize more on technological, process and product innovations compared to the Malaysian organisations. The results revealed that the culture of Japanese organisations is different from the culture of Malaysian organisations in some aspects such as life long employment, seniority system and status equalization. Besides that, the Japanese organisations also have better financial performance than the Malaysian organisations. On the whole, the overall results from this study showed that Japanese organisations are more innovative than Malaysian organisations.

This research contributes to a better understanding of the innovation practices in the Malaysian and Japanese organisations. The study may enable Malaysian organisations to adopt some of the relevant innovations in Japanese organisations. This study may also help to improve the Malaysian managers'

ability to prescribe adequate strategies and tactics that can enhance the success of innovation practices in the Malaysian organisations.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains.

**PENGURUSAN INOVASI DALAM ORGANISASI-ORGANISASI DI
MALAYSIA
- PERBANDINGAN DI ANTARA ORGANISASI JEPUN DENGAN
ORGANISASI MALAYSIA**

Oleh

ADELINE CHEONG YU NAH

April 1998

Pengerusi : Profesor Madya Dr. Mohd Zain Bin Mohamed

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Kajian ini bertujuan untuk menilai pengurusan inovasi dalam organisasi-organisasi di Malaysia (perbandingan di antara organisasi Jepun dengan organisasi Malaysia). Suasana inovasi dan kreatif dua belas organisasi , di mana enam daripadanya dimiliki oleh orang Jepun dan enam lagi dimiliki oleh warganegara Malaysia telah dibandingkan menggunakan soal selidik suasana kreatif (Creative Climate Questionnaire, CCQ) yang digubal oleh Ekvall et.al. (1983). Selain itu, pelbagai aspek inovasi seperti inovasi teknologi, inovasi proses dan inovasi produk,

serta aspek kebudayaan dan kewangan dibandingkan di antara organisasi Jepun dan Malaysia.

Data untuk kajian ini didapati melalui temuramah, penggunaan soal selidik dan data-data yang didapati daripada organisasi-organisasi. Dari kajian ini, didapati bahawa kedua-dua organisasi Malaysia dan Jepun adalah inovatif. Walau bagaimanapun, organisasi Jepun mempunyai suasana kerja yang lebih kreatif, menekankan lebih pada inovasi teknologi, proses dan produk berbanding dengan organisasi Malaysia. Keputusan daripada kajian ini juga menunjukkan bahawa kebudayaan kerja dalam organisasi Jepun adalah berlainan dengan organisasi Malaysia dalam beberapa aspek seperti kerja seumur hidup, sistem kesulungan dan persamaan status. Dari segi prestasi kewangan, organisasi Jepun mempunyai prestasi yang lebih baik berbanding dengan organisasi Malaysia. Pada keseluruhan, kajian ini menunjukkan bahawa organisasi Jepun adalah lebih inovatif daripada yang dari Malaysia.

Kajian ini dapat mendalami pengetahuan mengenai inovasi-inovasi dalam organisasi-organisasi Malaysia dan Jepun. Kajian ini membolehkan organisasi Malaysia meneladani serta mengikut kerja inovasi yang dilakukan oleh organisasi Jepun. Selain itu, kajian ini juga membantu pengurus-pengurus Malaysia

membentuk strategi serta taktik yang dapat menjayakan inovasi dalam organisasi-
organisasi di Malaysia.

CHAPTER I

INTRODUCTION

Background

In 1990, Malaysia had the highest economic growth rate in Asia, which at that time was the world's fastest growing region (Walters 1991). It was expected that the growth would continue through the 1990s. In the past two decades, Malaysia has transformed from a commodity based economy into a manufacturing economy. This transformation can be attributed to macro economic and structural adjustment policies and strategies undertaken by the Government in the mid-eighties, which significantly contributed to the major inflow of foreign direct investments (FDIs) and the rapid growth of the manufacturing sector. The Industrial Master Plan (IMP), 1986-1995 has laid the foundation for the growth of the manufacturing sector. Such rapid growth of the manufacturing sector will have to be sustained in the next decade in order for the country to attain the objective of becoming a fully developed industrialised nation by the year 2020.

Manufacturing output expanded significantly during the IMP period. Exports of manufactured goods expanded by 28.6 per cent during the plan period surpassing the target of 9.4 per cent. The share of manufacturing exports to total merchandise exports increased to 79.6 per cent in 1995 from 32.8 per cent in 1985. Manufacturing value added registered an average growth rate of 13.5 per cent per annum during the same period, higher than the forecasted 8.8 per cent (Second Industrial Master Plan).

The successful growth and transformation of the economy requires the nation to address the challenge of efficient and optimal utilisation of existing resources in order to sustain and further improve the national competitiveness. The rapid changes in the global trading and investment environment necessitates the enhancement of the competitiveness and resilience of the manufacturing sector.

Malaysia, one of the roaring tigers of Asia, emerged in 23rd spot in the 1996 World Competitive Scoreboard. In the World Competitiveness Yearbook 1996 (Malaysia Trade Quarterly), competitiveness is defined as *“the ability of a country to create added value and thus increase national wealth by managing assets and processes, attractiveness and aggressiveness, globality and proximity, and by integrating these relationships into an economic and social model.”*

The Second Industrial Master Plan (IMP2), 1996-2005 will thus focus on increasing competitiveness through strengthening industrial linkages, both forward and backward, enhancing value added activities, and increasing the productivity of the manufacturing sector. The strategy requires building concentrations of innovative organisations served by quality and efficient Malaysians. With full implementation of the strategies of IMP2, it is expected that the Malaysian share of manufacturing sector to GDP will peak to 38.4 per cent by year 2005, higher than the record of 38.2 per cent experienced by Taiwan in 1985 (Rancangan Malaysia Ketujuh).

In certain manufacturing sectors, Malaysia is one of the world's top exporters of manufactured goods. For example, in 1989 Malaysia was the third largest exporter of semiconductors in the world after Japan and United States (Saghafi and Davidson, 1989). However, penetrating the export market has become increasingly difficult due to uncertain world economic conditions increased protectionism from foreign countries (Rancangan Malaysia Kelima, 1986), and the increasing number of the regional economic groupings (such as the European Economic Community (EEC), the more United Europe, Asia Pacific Economic Corporation (APEC), the North America Free Trade Agreement (NAFTA), and the proposed East Asian Economic Caucus (EAEC)). This situation has resulted in an increase in the

challenge and competition faced by the industry. According to the World Trade organisation Report 1995, Malaysia maintained its position as the 19th largest exporter and the 17th position on the world import rankings. In 1996, Malaysia bought over the automotive manufacturing (Lotus) and it is moving towards the heavy industrialisation.

Having entered into its ninth year of consecutive growth averaging 8.9 per cent and successfully capping inflation at below four per cent, Malaysia boasts an economy which many have tried but failed to achieve (Malaysia Trade Quarterly).

Rapid and sustained growth created a higher standard of living, one which increased the per capita income of Malaysians from a mere RM1,106 in 1970 to RM9,786 in 1995. The purchasing power of Malaysian citizens rose from US\$978 to US\$9,470 in the same period (Rancangan Malaysia Ketujuh). Guided by the vision and dynamism of the Prime Minister, Dr Mahathir Mohamad, Malaysia has become a model economy to many countries, developing and developed countries.

Now that eight years have passed and the country is entering into its ninth year of successive growth, the biggest challenge faced by the nation is to sustain its growth at this pace into the next millennium. Thus enters the Seventh Malaysia Plan, the blue print for development which will take the nation into the 21st century.

With emphasis on industrialisation, the Plan, which was unveiled recently, will concentrate on taking Malaysia into the future not only as an economic powerhouse but also as a united force, benefiting in the process, every Malaysian.

As Dr Mahathir sums it up in the foreword of the Seventh Malaysia Plan :

“The plan is a pragmatic blend of proven and new development strategies and programmes. The formulation of the plan was largely guided by the objectives and strategies of the National Development Policy (NDP). It also incorporates several new strategies to deal with the expected challenges and changes to Malaysian society and the economy.”

Continuous challenges and competitions in the business environment of the 1990s require Malaysia to successfully develop incremental improvements (Bessant, 1992); a passion for excellence (Peters, 1989); etc. In such a situation, innovations play an important role in making the Malaysian organisations more efficient, effective and in better position to face the world

competition and the sophistication of the international business as the country moves towards the twenty first century.

Innovation is the creation of any product, service or process and technologies which is new to an organisation. While innovation is often associated with major product or process advances, the vast majority of successful innovations are based on the cumulative effect of the incremental change in products and processes , or in the creative combination of the existing techniques, ideas, or methods. Effective innovation requires the synthesis of market needs with technological possibility and manufacturing capabilities. Therefore, innovation is believed to be an important part of a healthy organisation since it enables an organisation to adapt to the changing markets, thus retaining its competitiveness and allowing it to survive and grow (Bessant and Grunt,1985; Delbecq and Mills, 1985). Through innovation, organisations can achieve competitive advantage by the way of improvement in the relative cost position or via the creation of differentiation. Hence, very often, innovative companies are successful in establishing themselves as industry leaders.

The Importance of Innovation in Malaysian Organisations

In today's business environment, there is no executive task more vital and demanding than the sustained management innovation and change; it sometimes seems that every aspect of business is in a state of flux - technology, product and process development, global competition. The rapid changes in the market place make it increasingly difficult and essential for business to think in terms of the future and to anticipate tomorrow's definition of value - the right mix of quality, service, product, characteristics and price. To compete in the ever changing environment, Malaysian organisations must create new products, services, processes and technologies; to dominate they must adopt innovation as a way of corporate life. Therefore, innovation is both important and tremendously difficult.

Malaysia is facing the challenge of rapid economic growth and development as the world's growth centre is shifting across the Pacific. It has been forecasted that by the year 2000, the economies of East Asian countries, which span from Japan to Indonesia, would certainly be equal to that of the United States and total about four-fifths of the EEC (FORTUNE, October 5, 1992, p. 20). As a member of

the Pacific -Rim, a dynamic region which since the late eighties and early nineties has been receiving a lot of focus and attention from advanced countries such as USA and Japan (Naisbitt, 1990), there is a need for Malaysia to be more innovative. Malaysian organisations will lose ground to competitors both within the country and globally if they are not responsive to innovations. With rising customer expectations and increasing competition the organisations are left with no choice but to continuously innovate.

In the 1994 Malaysian Industry Excellence Awards 1994 (Malaysia Trade Quarterly), Dr. Mahathir commented :

“To maintain and strengthen the position of the manufacturing sector, manufactured products must be of better quality than those of other countries. This will also ensure that our products will be much more successful in penetrating the global market.”

Dr Mahathir asserted that the business community should gear themselves to be less labour intensive and adopt more automation, with a view of greater productivity. He said:

Like the Japanese word kaizen which means improvement all the time, it is only logical that we look at our products and see how we can improve them all the time. Innovation is important in this aspect.”

In view of the growing need to improve the performance of the Malaysian organisations to compete in today's business environment, it is most opportune that a comprehensive research be conducted to analyse the innovation management between Malaysian and Japanese organisations. This can be done by examining the product, process and technological innovations, strategies and the cultural aspects between Malaysian organisations and Japanese organisations. This would add more knowledge to the varied nature of the innovation practices by the Malaysian organisations.

In the search for greater international competitiveness, many Western organisations are currently looking to Japanese innovation strategy as a blueprint for business success. The Japanese firms moved from imitation to innovation phase in selected technological areas (Matsumoto, 1985). In 'Global:500' list in Fortune, of the top 50 firms, ten are Japanese and most of them concentrate more on commercialising innovations, continuous innovations and fusing different technologies to get innovative new combinations of products (Fortune, 1992).

Therefore, this research will examine the innovations and changes that take place in Malaysian organisations and Japanese organisations in order to ascertain

and understand the nature of the innovative processes and strategies taking place in the organisations from selected industry sectors, the innovativeness between them.

The result of this study will put Malaysian organisations in a better perspective in knowing where they stand in relation to the Japanese organisations, particularly to those within the same industry sector. This would put them in a better position to face competition. As Malaysia moves towards becoming a fully industrialised nation by the year 2020, as envisaged by the Prime Minister (Mahathir, 1991; FORTUNE, October 5, 1992, p. 55), innovations has become not only the domain of a few progressive organisations but the key survival and success of the many. Innovation changes in management practices can assist Malaysian organisations in ensuring survival in an increasingly competitive world and in achieving vision 2020.

Definitions of Innovation

There have been many and varied definitions of innovation found in the literature. One of the most commonly definitions of innovation that is given by Zaltman (1973) is that innovation is “ an idea, practice, material artifact perceived

to be new by the relevant adoption unit”. A similar definition to this has been adopted by Daft (1978), Damanpour and Evan (1984) and Damanpour (1990).

An innovation is a new idea, which may be recombined of old ideas, a scheme that challenges the present order, a formula, or a unique approach which is perceived as new by the individuals involved (Zaltman, Duncan and Holbeck, 1973; Rogers, 1983). As long as the idea is perceived as new to the people involved, it is an “innovation”, even though it may appear to others to be an “imitation” of something that exists elsewhere.

According to Freeman (1982), innovation is considered as a commercialisation of invention. In 1982, Michael define innovation as the creation of any product, service, or process which is new to a business unit. As for Kuniyoshi Urabe (1988), he defines innovation as generation of new ideas and their implementation into a new products, processes or services, leading to the dynamic growth of the national economy and the increase of employment as well as the creation of pure profit to the innovative organisations. Nystrom (1990) broadly define innovation as the “creation of the future”. It is the process of bringing new ideas (new products, processes, services, management, techniques and etc) into use